

## WHAT IS CLAIMED IS:

1. An amino acid sequence determination for protein or peptide including the following steps (A) and (B):

5 (A) chemically cutting constitutive amino acid one by one from an N end of protein or peptide for liberating the constitutive amino acid; and

(B) identifying the liberated constitutive amino acid by immunoassay utilizing an antibody against a derivative of the constitutive amino acid liberated by the chemical cutting.

10 2. The amino acid sequence determination according to claim 1, wherein the constitutive amino acid includes constitutive modified amino acid.

15 3. The amino acid sequence determination according to claim 1, wherein the steps (A) and (B) are successively repeated one by one every the constitutive amino acid.

20 4. The amino acid sequence determination according to claim 1, wherein the immunoassay is a competitive method.

25 5. The amino acid sequence determination according to claim 4, wherein

the immunoassay employs such a microplate that monoclonal antibodies for various types of PTH amino acids are fixed to respective wells of the microplate one by one and analogs with labels to PTH amino acid derivatives bonding with the respective monoclonal antibodies are previously added to be bonded with the monoclonal antibodies and includes steps of

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(1) dripping a solution containing PTH amino acid derivatives obtained by Edman degradation on to the microplate,

(2) washing out non-bonded PTH amino acid derivatives and analogs liberated by competitive reaction,

5 (3) adding labeled antibodies against analogs, and

(4) measuring the quantity of the labeled antibodies bonded with the analogs.

6. The amino acid sequence determination according to claim 5,  
10 wherein

the quantity of the monoclonal antibodies in the respective wells as well as the quantity of the analogs are fixed.

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